UCEB

Executive Bulletin

Volume 2, Number 4

Problems Occur When You Can Least Afford Them, So Planning is Critical

With tornadoes in the Midwest, April snows in Colorado, a 6.2 (Richter scale) earthquake in San Jose near the heart of Silicon Valley, and heavy rains in the Northeast and Southeast, it should be obvious to one and all that nature causes disasters from which you, the information system manager, must recover.

The subject of disaster recovery planning, much like insurance, is one that most of us prefer to ignore. This is not because we don't recognize the importance of creating and honoring such a plan, but because we always have other, more time-critical commitments.

This Executive Bulletin will outline key basic items that you should deal with now, in advance of a disaster. Such items include:

1. Storage.
2. Key personnel.
3. Processing facilities.

We at INPUT strongly suggest that you take the time to at least do some basic, preliminary preparation for the "it could never happen to us" disaster, whether it is natural or otherwise. Specifically we suggest that you:

1. Create (and keep current) a method for storing files, programs, documentation, etc.
2. Create (and keep current) a list of key personnel required to keep your company's systems running.
3. Have available (and not only in your desk) as comprehensive a list as possible of local, or near-local, processing facilities, plus the arrangements you (hopefully) have already made with these facilities.

← Add Peter's signature here

File, Data, and Progr

As the one responsible for information system management, your focus should be on the key word--information--without which there is no business. Finding an off-site vault location (at which you can store all of your master files, program listings, processing documentation, et al) is an easy

proposition. (This is different from hiring an off-site Disaster Recovery Service, although if you hire one the problem of off-site storage of critical information and the problem of overall recovery can be handled at one time.) The exact distance this location should be from your operating center is dependent upon the type of major disaster most likely to occur. If, for example, flooding is a possibility then logic dictates that your off-site vault be maintained in a location that is not going to be affected by the same natural catastrophe.

Once you have selected the site, you need to copy and catalog all of the information that should be maintained at this location. Additional copies of this catalog should be kept off-site, preferably at a branch location and at some of the homes of the key personnel. This catalog, and the data that is stored off-site, has to contain all of your "must" systems and as many of your "also important" systems as you can reasonably keep current given the ongoing requirements of your operation.

This leads us to the final point of this section--making sure that, as you back up your system for normal security purposes, you transfer updated master files, necessary transaction files and, if pertinent, new documentation files (or hard copy) to the off-site vault. This ongoing effort must be done at least monthly and should probably be done on a weekly basis to preclude having to manually recreate as much as 30 days worth of transaction data. If a disaster does occur you'll have lots more important things to worry about than catching up with already-completed work.

Key Personnel

If a disaster occurs, the key word to remember is disaster. You will potentially have to process information in a scramble mode. In a worst case situation, you not only can lose your system but some of your key people as well. (This is a gruesome thought, but the contingency must be prepared for.) Other staff members will have to process as much information as they can with limited supervision and decreased processing capabilities.

By maintaining in at least three locations (the vault, on-site, and at the house of one or more staff members) a list of all key personnel, you will still have an ability to process. For each person identified, there should be at least one, preferably two, backup individuals who can support your processing needs. Operations, applications programming, and systems software are the three disciplines that must be protected. Customer support, documentation, data entry, etc. are also important but usually to a lesser degree than these first three.

As a part of this program you need to ensure that all personnel that will be called upon in a disaster are trained in the procedures they will follow. Dry runs, including actually shutting down your system, should be implemented.

If you are a one-shift, one-level-of-staffing shop, you need to consider locating and arranging for a third party to support your system when the need arises. In this case, the key contact information regarding this outside organization should also be kept at the locations mentioned above.

Processing Facilities

You now have the people, the programs, reasonably current updated records, and documentation. All you need now is a computer and a place to run it. Remembering still that disaster is the key word, you will have:

a) Arranged with a sister firm in another locale to support your needs for some period of time. (Remember that these kinds of arrangements are usually reciprocal.)

b) Arranged with a service organization in another location to support you until your installation has recovered.

c) Arranged for a space-only location into which a new hardware configuration can be delivered as soon as your vendor can supply you with the needed equipment.

In addition, you, as part of this requirement, will have a guarantee from your vendor describing how long it will take to get that new system to your space-only backup site or to your new or renovated location.

By covering these three areas, you give yourself primary protection against a disaster putting your organization in an operating bind or, at the very worst, out of business. There are a lot of other items that need to be looked at in order to properly complete a disaster recovery plan, including arrangements for transportation, data entry, communications, supplies, etc. But, by handling the basic three indicated above, you should be able to keep yourself going regardless of the magnitude of the disaster.

And, almost as a by-product, you have begun a formal disaster recovery plan that you should try to complete as soon as you can find the time or get out from under other priorities.

It is in your best interest overall to prepare and fully document a detailed disaster recovery program that at least covers the following items:

- Initial notification procedures.
- Plan organization and structure.
- Plan activation criteria.
- Off-site storage procedures.
- Vault resource requirements listing.
- Software restoration procedures.
- Off-site checklists.
- I/O responsibilities.
  - Critical run reconstruction.
  - Schedules.

- Administrative procedures.
  - Personnel.
  - Security.
  - Transportation.
  - Insurance.
  - PR.
  - Legal.
  - Purchasing/supply.
- User support requirements.
  - Application specialists.
  - User data reconstruction.
  - Critical Data Application Schedules.
  - Special call list.
  - Communications links.
- Testing procedures.
  - Audits.
  - Reviews.

When these, plus others, are completed you will have a full plan—documented, tested, and proven.

Whether you choose to hire an outside service, rent a shell, or rent a full backup facility, you still need the plan and you need to convince senior management that the failure to have such a plan can potentially put you out of business. The availability of a plan can expedite recovery from a disaster as simple as a flood in the computer room or as complex as complete destruction of the machine facility and everything (and everybody) inside.

This Executive Bulletin reminds you that not only does it not pay to fool with Mother Nature, but also it doesn't pay to ignore her.

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~~Much like the welcome given to an insurance salesperson, which is at best reluctant,~~ the subject of disaster recovery planning, much like insurance, is one that most of us prefer to ignore. Not because we don't recognize the importance of creating and honoring such a plan, but because we always have other, more ~~more pressing,~~ time-critical commitments ~~that fill our time.~~

We at INPUT strongly suggest that you take the time to at least do some basic, preliminary preparation for ~~that "never~~ the "it could never happen to us" ~~event~~, disaster, whether it is naturally or otherwise ~~caused~~. Specifically we suggest that you:

1. Create (and keep current) a method for storing files, programs, documentation, etc.

Yuck! This Executive Bulletin will not list key basic items that you should look into in advance of a disaster, including. Such items include:
1. STORAGE
2. KEY PERSONNEL
3 - PROCESSING FACILITIES

format! Introduction should also include a few major sections of the text

2. Create (and keep current) a list of key personnel required to keep your company's systems running.
3. Have available and (not only in your desk) as comprehensive a list as possible of local, or near-local, processing facilities plus the arrangements you (hopefully) have already put in place with them.

Peter Cummings

Is this for Peter C. to see?
No!

File, Data, and Program Storage

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ok? or have I changed meaning do this = ?

Once you have selected the site, you need to copy and catalog all of the information that should be maintained at this location. Additional copies of this catalog should be kept off-site, preferably at a branch location and at some of the homes of the key personnel ~~you will call upon to process if, and of course, when a disaster occurs~~. This catalog, and the data that is stored off-site, has to contain all of your "must" systems and as many of your "also important" systems as you can reasonably keep current given the ongoing requirements of your operation.

to process what ?

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(This is a gruesome thought, but the contingency must be prepared for.)

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By maintaining in at least three locations, the vault, on-site, and at the house of one or more staff members, you will still have a list of all key personnel, you will still have an ability to process.

something missing here (?) all?

As a part of this program you need to ensure that all personnel ~~that will~~ be called upon in a disaster ~~be~~ trained in the procedures they will follow. Dry runs, including actually shutting down your system, should be implemented ~~(and not only during a time period when the immediacy of the problem is not addressed.)~~

If you are a one-shift, one-level-of-staffing shop, you need to consider locating and arranging for a third party to support your system when the need arises. In this case, the key contact information regarding this outside organization is kept at the locations mentioned above.

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  - . Audits.
  - . Reviews.

close ups

When these, plus others, are completed you will have a full plan documented, tested, and proven.

Whether you choose to hire an outside service, rent a shell, or rent a full back up facility, you still need the plan and you need to convince senior management that the failure to have such a plan can potentially put you out of business. The availability of a plan can expedite recovery from a disaster as simple as a flood in the computer room to as complex as complete distribution of the machine facility and everything (and person) inside.

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← or Corporate ?

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Much like the unwelcome visit to an insurance salesperson, the subject of disaster recovery planning is one that most of us prefer to ignore. Not because we don't recognise the importance of honoring such a plan but because we always have other more pressing, time-critical commitments that fill our time.

Be that as it may, we at INPUT, strongly suggest, that you take the time to at least do some basic, preliminary preparation for that never happen to us event. Specifically we suggest that you:

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OFF-SITE

Key Personnel

When, or if, a disaster occurs, the key word (~~not information, this time~~) to remember is disaster. You will potentially have to process information in a scramble mode, IN a worst case situation, you not only can lose your system but your key people as well. (AWESOME THOUGHT, — BUT ---) This means that other staff members will have to try to process as much of the information they can with limited supervision and decreased processing capabilities.

CAN LOSE SOME OF YOUR

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If you are a one-shift, one level of staffing shop, you need to consider locating and arranging for a third party to support your system ~~if~~ NOW the need arises. ~~For~~ IN this case, the key contact ~~for~~ IN PRIORITY RESPONSE this outside organization is kept at the locations mentioned above.

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~~Now that wasn't all that difficult.~~ By covering these three areas, you give yourself primary protection against a disaster putting your organization in ~~debt~~ OPERATING BIND, or worse, out of business. There are a lot of other items that need to be looked at in the proper completion of a disaster RECOVERY PLAN INCLUDING ARRANGEMENTS FOR: transportation, data entry, communications, supplies, etc. But, by handling the basic three INDICATED ABOVE, you should be able to keep yourself going regardless of the magnitude of the disaster.

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~~ANSWER~~

Insert 1

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U-CEB BACKUP

Executive Bulletin

Volume 2, Number 3

An Unusually Noteworthy Introduction of a Xenolith*

Eight years ago, INPUT predicted a battle between two giants as computer and communications technologies merged into integrated networks. Since then, IBM revenue has grown from $16 billion to $40 billion, and the Bell System has been broken up. From a hardware point of view, AT&T Technologies Inc.'s announcement of its 3B line of 32-bit processors is strictly David versus Goliath, but David's sling is armed with a xenolith aimed directly at Goliath's software monolith. The UNIX shot was telegraphed from way back, and Goliath looks bored by these developments; but we have all been waiting for this match, so let's take a look at it.

1. The Target is Right!
2. SNA Xenophobia
3. VM/CMS/MVS/XA/UNIX - Excalibur?

The Target is Right!

INPUT predicted the IBM-AT&T battle in the Economics of Computer/Communications Networks and Their Future Impact, March 1976. That report also described hierarchical networks consisting of very large mainframes ($4 million price range), minicomputers (less than $200,000), and intelligent terminals (less than $20,000) and defined their "proper functions" as follows:

- Mainframes - heavy computation, transaction processing against large data bases, and RJE replacement of standalone batch systems.
- Minicomputers - network control, scientific timesharing, program development and maintenance, and simple transaction processing.
- Intelligent Terminals - collection, editing, and display of data; control of lower level terminals (input-output devices).

* Xenolith - A fragment of rock included in another rock

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Executive Bulletin

Volume 2, Number 3

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